

Title (en)  
LI2O-AL2O3-SIO2 TYPE TRANSPARENT CRYSTALLIZED GLASS AND CRYSTALLINE GLASS

Title (de)  
TRANSPARENTES, KRISTALLISIERTES GLAS VOM LI2O-AL2O3-SIO2-TYP UNDKRISTALLINES GLAS

Title (fr)  
VERRE TRANSPARENT CRISTALLISE DE TYPE LI2O-AL2O3-SIO2 ET VERRE CRISTALLIN

Publication  
**EP 1114803 B1 20050928 (EN)**

Application  
**EP 99973870 A 19990621**

Priority  
• JP 9903293 W 19990621  
• JP 14942699 A 19990528

Abstract (en)  
[origin: EP1114803A1] In an Li<sub>2</sub>O-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> transparent crystallized glass, beta -quartz solid solution is produced as main crystals, an average coefficient of linear thermal expansion within a range between 30 and 380 DEG C is  $-10 \times 10^{-7}$  / DEG C, and beta -OH in an amount of 0.28/mm or more is contained. Preferably, the content of each component of Li<sub>2</sub>O, SiO<sub>2</sub>, and Al<sub>2</sub>O<sub>3</sub> satisfies, by weight ratio, the relationship given by  $0.058 \leq \frac{\text{Li}_2\text{O}}{\text{SiO}_2 + \text{Al}_2\text{O}_3} \leq 0.031$ .

IPC 1-7  
**C03C 3/085; C03C 10/12**

IPC 8 full level  
**C03C 10/00** (2006.01); **C03C 10/12** (2006.01); **C03C 10/14** (2006.01)

CPC (source: EP US)  
**C03C 10/0027** (2013.01 - EP US)

Cited by  
EP1518838A1; EP3878825A1; EP1864952A1; CN105218170A; DE102005032786A1; DE102005032786B4; FR3088321A1; US8043985B2; WO2012010341A1; US9446982B2; US11932577B2; WO2020094734A1

Designated contracting state (EPC)  
BE DE DK FR GB NL

DOCDB simple family (publication)  
**EP 1114803 A1 20010711; EP 1114803 A4 20040414; EP 1114803 B1 20050928; EP 1114803 B2 20081126**; CA 2338354 A1 20001207; CA 2338354 C 20090106; DE 69927511 D1 20060209; DE 69927511 T2 20060323; DE 69927511 T3 20090625; DE 69927511 T8 20060608; DK 1114803 T3 20060206; US 6593258 B1 20030715; WO 0073225 A1 20001207

DOCDB simple family (application)  
**EP 99973870 A 19990621**; CA 2338354 A 19990621; DE 69927511 T 19990621; DK 99973870 T 19990621; JP 9903293 W 19990621; US 74412001 A 20010119